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COST ACCOUNTING FOR AGRICULTURE

PART I METHODOLOGICAL PROCEDURE FOR DETERMINING COST
OF PRODUCING FARM CROPS

by

I. F. Furniss



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Illustration Stations Division

Central Experimental Farm

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FOREWORD

This monograph was prepared primarily for the guidance of Research Officers of the Illustration Stations Division, Experimental Farms Service. The procedure is equally applicable to farms other than Illustration Station units. It must be recognized however, that differing cost of production values will be obtained in agriculture according to the method of calculation. The same procedure must always be used in order to obtain comparable values between years and locations. In this monograph we have attempted to account for all known cost factors, including management, by the use of a procedure which will reflect changes in price levels and technology.

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COST ACCOUNTING FOR AGRICULTURE

PART I METHODOLOGICAL PROCEDURE FOR DETERMINING COST OF PRODUCING FARM CROPS

Farm cost accounting is primarily a research procedure. The general objective is to determine in detail the physical inputs and costs of same involved in producing crops for a given set of limiting conditions. Some of these limiting factors are: markets, climate, soils and farm organization. While the precisely determined figures are not exactly applicable to any but the stated set of conditions, this fact does not invalidate or seriously limit the usefulness of cost studies.

Certain limitations to farm cost accounting must be recognized:

1. It often fails to produce correct answers to the farmer's problems. While there may be many cases where the overall economy of a farm is being undermined by one or two high cost enterprises in an otherwise sound farming system, there are many more where the trouble lies either in poor organization of the farm as a whole, or in inefficiency in a particular aspect of management which affects all the enterprises.
2. The lowest cost per unit of output is not necessarily synonymous with maximum profit for the farm.
3. The biological nature of the agricultural industry and the many variables found in the environment limit the value of cost of production analyses.

Some specific objectives in cost of production analyses are:

1. to measure the comparative profitability of various cropping sequences and crop rotations, for example, particularly where it is desired to compare cash grain rotations with those which incorporate forage crops.

2. to measure the physical inputs in the form of hours of machine use and man-labor and to apply unit costs to these factors.
3. to evaluate the influence of types of machinery, cultural practices and environmental factors on costs.

We shall now proceed to determine the cost of producing farm crops for the Illustration Station farm at Braeside 1/, Sask., in the five-year rotation fallow-wheat-oats (seeded down)-hay-hay and break for the crop year 1956. This rotation is being studied at Braeside in two-acre plots. All man and machine performance factors used are for large-scale representative fields on the station farm for the corresponding years.

Table I. - Inventory Values for Land and Improvements, Braeside, Sask., at Jan. 1, 1955 (Dec. 31, 1954)

<u>Item</u>	<u>Number</u>	<u>Value</u>
		\$
<u>Land:</u>		
Total Acres	480	6,000
Cultivated Acres	443	
Fences	-	867
House	1	2,467
Barn	1	1,197
Machine Sheds	2	1,038
Garage	1	421
Granaries	3	631
Other Buildings (Poultry, Hogs and Miscellaneous)	-	1,225
TOTAL Value of Land and Improvements		13,846

1/ "Braeside" is a pseudonym

These appraised values were determined initially as outlined in the mimeographed publication issued by the Illustration Stations Division, C.E.F. in 1956 (with subsequent revision of Sept. 16, 1957) and titled:

"Recommended Procedure for Taking Farm Inventory on Illustration Stations."

Our hundred per cent assessed values for land may be used when available but should these fall below or be above the normal sale value of the same type of land by more than 5% and for more than three years, then assessed values cannot be considered suitable and should be adjusted accordingly. Appraised values for land are only strictly applicable at the time of appraisal due to continuing changes in price levels.

Step 1. - To Determine the Cost Per Acre of Producing Fallow in 1955 at Braeside, Sask.

A. USE OF LAND

This charge is also described as "rent of land." Interest is charged at 5% on the appraised value of the land.

From Table I, Value of land is \$6,000.

Interest at 5% on this amount is:

$$\$6,000 \times .05 = \$300.00.$$

From Table I, Number of owned cultivated acres is 443 acres.

Then, cost per acre for use of land is:

$$\$300.00 \div 443 = \$0.68 \text{ per acre.}$$

Where there is a large acreage of improved permanent pasture, this acreage should be included with the cultivated acreage figure when determining the charge per acre.

B. TAXES

The total tax bill is divided by the number of owned cultivated acres. Where there is a large acreage of improved permanent pasture, this acreage should be included with the cultivated acreage figure when determining the charge per acre.

In 1955, the total land tax for Braeside was \$317.00 (from Revenue and Expenditure Accounts).

From Table I, Number of owned cultivated acres is 443 acres.

Then, tax charge per acre is:

$$\$317.00 \div 443 = \$0.72 \text{ per acre.}$$

C. COST OF FIELD OPERATIONS

In order to determine fixed costs for machinery, estimates of service life, repairs and annual use are established. These are set forth in Table II.

Table II. - Assumed Service Life and Annual Depreciation Rates and Repair Rates for Farm Equipment

Class of Machinery	Probable-Life Estimate <u>a/</u>	Depreciation Rate <u>b/</u>	Assumed Annual Use	Repair Rate for Life <u>a/c/</u>
	hrs.	%	hrs.	%
Tractors	10,000	15	1,500	80
Tillage Machinery	3,000	10	300	100
Seeding Machinery	2,000	10	200	150
Harvesting Machinery <u>1/</u>	2,000	10	200	150
S. P. Combines	2,000	15	300	150
General Equipment <u>2/</u>	-	10	-	-
Gas Engines	-	10	-	-
Electric Motors	-	10	-	-
Trucks and Autos	-	15	-	-
Trailers	-	15	-	-
Wagons (all types)	-	15	-	-
Wagon boxes and hay racks	-	15	-	-
Sleighs	-	15	-	-

a/ Thompson, J. L. and A. Wenhardt, Cost Charges for Agricultural Machinery: Western Canada (Can. Agric. Pub. 881, July 1954).

b/ As established by the Dept. of National Revenue, Income Tax Division.

c/ Based upon replacement values.

1/ Except self-propelled combines.

2/ Except wooden equipment.

C. 1 FIXED CHARGES FOR MACHINERY

To establish these costs, replacement values^{1/} for all items of machinery and equipment necessary for crop production on the farm must be determined each year. Interest is charged on half the replacement value at 6%. This is then divided by the assumed or actual annual use in hours to obtain the cost per hour. Depreciation charges per hour are determined by dividing the total replacement cost by the probable-life estimate from Table II. The repair cost per hour is determined by multiplying the replacement cost by the repair rate from Table II and dividing by the probable-life estimate in hours. Housing costs for equipment (a building charge) are determined on the basis of 50¢ per year per \$100 of replacement value (.5% of the replacement cost of the implement). This is then divided by the assumed or actual annual use in hours to obtain the cost per hour for the year. For low value machines, the cost will amount to less than .5¢ per hour and can be ignored. Data relating to the fixed charges on machinery for Braeside in 1955 and 1956 have been tabulated in Table III, Parts I and II.

^{1/} Replacement value is the price prevailing locally for a new and comparative machine.

Table III. -- Fixed Costs for Field Machinery, Braeside, Sask.,

1955 and 1956

Part I

Item		Trac- tor Plow	One- Way	Disc Harrow	Tillage			Seeding	
					Spring Tooth Harrow	Packer	Culti- vator	Rod Weeder	Grain Drill
Replacement Value at Jan. 1	\$	400	550	250	150	200	285	175	300
Actual Use This Year	hrs.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.
Annual Interest Charge	\$	12.00	16.50	7.50	4.50	6.00	8.55	5.25	9.00
Total Repair Charge	\$	400	550	250	150	200	285	175	450
Annual Housing Charge	\$	2.00	2.75	1.25	.75	1.00	1.42	.88	1.50
Cost Per Hour:									
Interest (6%)	\$	.04	.06	.02	.02	.02	.03	.02	.04
Depreciation	\$	.13	.18	.08	.05	.07	.10	.06	.15
Repairs	\$	.13	.18	.08	.05	.07	.10	.06	.22
Housing	\$	.01	.01	-.1	-.1	-.1	-.1	-.1	.01
TOTAL	\$	.31	.43	.18	.12	.16	.23	.14	.42

n.a. not available * less than $\frac{1}{2}$ cent

Table III. - Fixed Costs for Machinery, Braeside, Sask.,

1955 and 1956

Part II

Item		Harvesting							Power		Special	
		Trac- tor Mower	Horse Mower	Dump Rake	Side Deliv- ery Rake	Baler	Swath- er	Grain Binder	S.P. Com- bine 1955	S.P. Com- bine 1956	Tractor	Sprayer
Replacement Value at Jan. 1	\$	345	180	175	450	1,615	835	600	4,500	4,500	2,800	400
Actual Use This Year	hrs.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	146	175	700	80
Annual Interest Charge	\$	10.35	5.40	5.25	13.50	48.45	25.05	18.00	135.00	135.00	84.00	12.00
Total Repair Charge	\$	518	270	262	675	2,422	1,252	900	6,750	6,750	2,240	-
Annual Housing Charge	\$	1.72	.90	.88	2.25	8.08	4.18	3.00	22.50	22.50	14.00	2.00
Cost Per Hour:												
Interest (6%)	\$	.05	.03	.03	.07	.24	.13	.09	.92	.77	.12	.15
Depreciation	\$	.17	.09	.09	.22	.81	.42	.30	2.25	2.25	.28	.50
Repairs	\$	.26	.14	.13	.34	1.21	.63	.45	3.38	3.38	.22	-
Housing	\$	.01	-.1	-.1	.01	.04	.02	.02	.15	.13	.02	.02
TOTAL	\$	.49	.26	.25	.64	2.30	1.20	.86	6.70	6.53	.64	.67

n.a. not available * less than $\frac{1}{2}$ cent

C. 2 OPERATING COSTS FOR FIELD MACHINERY

From the farm operator's "Field Work Records" (Illustration Stations form EL61), hours of machine and man-labor required for each tillage operation necessary to prepare fallow in 1955 were determined. These figures were for large-scale fields, considered representative of the farm and rotation sequence. Fuel for the tractor was allowed at the rate of 2.2 imperial gallons per hour as recorded for the particular model of tractor on this station farm, a John Deere "AR", in "Tractor Data from Nebraska Tests", Univ. of Sask. Extension Bull. No. 132. If the operator had been able to record exact data on fuel consumption for his own tractor, these data would have been used in preference to the "Nebraska Test" data. Machine use costs per acre were obtained by multiplying the hourly costs as given in Table III by the number of hours (or fractions thereof) required per acre. Fuel was charged at 28.2¢ per gallon, the average farm price paid by the operator of the Braeside Station in 1955. Oil, grease and filters were charged at 10% of the fuel cost as outlined by W. Kalbfleisch and A. I. Magee in "Cost of Operating Farm Machinery (Eastern Canada)", Can. Agric. pub. 750. This method of determining oil, grease and filter costs would appear from Illustration Station records to underestimate actual costs of these items in certain cases but in view of the fact that repair costs by this present procedure tend to be overestimated, the 10% allowance can be accepted. Labor cost was charged at 95¢ per hour, which corresponds to the average hourly cash wage reported for Saskatchewan by the Dominion Bureau of Statistics for the spring of 1955. Where possible, labor costs should be related to those prevailing locally.

D. CHARGE FOR GENERAL FARM EQUIPMENT

General equipment for crops includes the farm share of the truck and automobile expenses, stationary engines (gasoline or diesel), separate electric motors, unused field equipment, fertilizer spreader, trailers, wagons and boxes, weigh scales, sacks, fuel tanks, farm tools and other items. Certain of these items are necessary for both crop and livestock production and the charges for such items must be apportioned between the two major enterprises.

Joint expenses on crops and livestock may be allocated according to the proportion of farm cash income derived from each source. Allocation of joint expenses between business and personal use of trucks and automobiles can best be done on the basis of respective mileages.

Table V. - Sources of Cash Income, Braeside, Sask., 1955

Source of Cash Income	Amount	Proportion of Total
	\$	%
Crops	2,556	41.7
Livestock	3,571	58.3
TOTAL	6,127	100.0

D. 1 TRUCK EXPENSES (AND/OR AUTOMOBILE)

Replacement cost for the truck and/or automobile is determined. Actual repair costs for the vehicles on the station farm may be used where they are not over five years old or 60,000 miles. Include a charge for the value of family or hired labor used to make repairs on vehicles. If vehicles are over these age

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or mileage limits, determine the average annual repair costs for the first five years of life of the vehicle or utilize data from another station farm. All other costs in connection with vehicle operation should be actual costs in so far as is possible. The total mileage driven in the year and the proportion driven on business is also determined. Allocate total business expenses for vehicles to crop and livestock production as determined in Table V.

Table VI. - Cost of Truck Operation, Braeside, Sask., 1955

Make:	Ford	Size:	1 ton	Year:	1954	Replacement Value:	\$2,800
Item		Cost					
Fixed Costs:							
Interest ($\frac{1}{2}\%$ replacement value x .06)		84.00					
Depreciation (15%)		420.00					
Repairs:							
Parts (actual)		(145.08					
Labor:		(
Contract		(
Own (at \$0.95 per hour)		2.85					
Housing (.5% of replacement value)		14.00					
Insurance		(
License		(27.00					
Antifreeze		2.75					
Total fixed cost		695.68					
Operating Costs:							
Fuel (988.2 gals. at 37.9¢ /gal.)		374.53					
Oil		(
Grease		(36.88					
Filters		(
Total operating cost		411.41					
TOTAL COST		1,107.09					

Total miles operated in 1955: 9,000 miles

Cost per Mile: $\$1,107.09 \div 9,000 = \$ 0.123$

Miles operated on business in 1955: 7,000

Cost of operating truck on business: $7,000 \times \$ 0.123 = \861.00

Share of truck expenses to crops: 41.7% (from Table V)

Total truck expenses on crops: $\$861.00 \times .417 = \359.04

Truck expenses per cultivated acre:

$$\$359.04 \div 443 = \$ 0.81$$

D. 2 EXPENSES FOR OTHER GENERAL EQUIPMENT

Do not include expenses for seed cleaning and treating equipment in this section as these will be accounted for under the cost of seed. No repair costs for general equipment are considered under this section. Fuel costs for stationary engines employed for operating grain loaders, bale elevators, etc., are accounted for under General Farm Expenses. Replacement values in Tables VII and VIII refer to those for the total number of implements of each type as shown for the farm inventory.

Table VII. - Charges for Other General Equipment Used on Crops Only,
Braeside Sask., 1955

Machine	No.	Total Replacement Value	Interest on Half Value @ 6%	Depreciation		Housing @ .5%	Total
				Rate	Amount		
		\$	\$	%	\$	\$	\$
Rubber tired wagon	1	375	11.25	15	56.25	1.88	69.38
Other Wagons	3	300	9.00	15	45.00	1.50	55.50
Wagon Boxes	2	200	6.00	15	30.00	1.00	37.00
Hay Racks	2	150	4.50	15	22.50	0.75	27.75
Weigh Scales	1	25	0.75	10	2.50	0.12	3.37
Sacks	50	50	1.50	10	5.00	0.25	6.75
Gas Engine	1	175	5.25	10	17.50	0.88	23.63
Total VII			38.25		178.75	6.38	223.38

Table VIII. - Charges for Other General Equipment Used for Both Crops
and Livestock,

Braeside Sask., 1955

Sleighs	2	200	6.00	15	30.00	1.00	37.00
Farm Fuel Tank	1	250	7.50	10	25.00	-	32.50
Small Tools	-	150	4.50	10	15.00	0.75	20.25
Total VIII			18.00		70.00	1.75	89.75

Share to crops of Table VIII: $\$89.75 \times .417 = \37.43

Total Other General Equipment Costs for Crops:

$$\$223.38 + \$37.43 = \$260.81$$

Other General Equipment Costs per Cultivated Acre:

$$\$260.81 \div 443 = \$0.59$$

D. 3 CHARGE FOR UNUSED FIELD EQUIPMENT

On any well organized farm, it is necessary to maintain a minimum inventory of equipment to handle all foreseeable contingencies. In any one year, certain items of equipment will not be used due to differing climatic conditions, crops grown and other factors. The overhead expenses for interest, depreciation and housing for this equipment must be charged to crop production. Caution must be exercised in making this charge. A machine should not be charged for as unused, even though it is on the inventory, unless it is deemed necessary for efficient crop production over a period of years. In 1955, a rod weeder on the Braeside machinery inventory was not utilized.

Table IX. - Fixed Costs for Unused Field Equipment, Braeside Sask.,
1955

Item	Unused Field Equipment
	Rod-Weeder
	\$
Replacement Value	175.00
Interest @ 6% on half value	5.25
Depreciation @ 10%	17.50
Housing @ .5%	0.88
Total Charges	23.63

Charge per Cultivated Acre:

$$\$23.63 \div 443 = \$0.05$$

D. 4 TOTAL GENERAL EQUIPMENT CHARGES

All general equipment charges for Braeside in 1955 have now been calculated and may be totalled to obtain the charge for this category of expense.

Table X. - General Equipment Charges for Crops,
Braeside Sask., 1955

Machine or Machinery Group	Amount	Charge per Cultivated Acre	Table Source
	\$	\$	
Truck	359.04	0.81	VI
Other General Equipment	260.81	0.59	VII and VIII
Unused Field Equipment	23.63	0.05	IX
TOTAL	643.48	1.45	

E. MISCELLANEOUS MAN (or HORSE) LABOR

Costs for this item would be charged over the direct acreage of fallow involved. There are not many items of cost which are likely to occur under this category for producing fallow which would not have been accounted for elsewhere.

F. GENERAL FARM EXPENSES

General farm expenses includes all those items of farm expense necessary for the overall operation of the business and not accounted for previously. These costs will be determined from the farm business accounts of the Braeside station farm. In determining these costs on a "per acre" basis, it is necessary to relate them to the proper acreage. Where part of a farm is rented, most general farm expenses are incurred both on account of the rented land and the owned land. General farm expenses include such items as fencing (depreciation, interest and repairs), telephone, electricity, fuel for stationary engines, building and machinery fire insurance (other than truck or automobile), etc. Items specifically related to crop production, such as hail insurance, are not included here. All building charges for interest, depreciation and repairs in connection with producing fallow have been accounted for under previous sections.

The share of general farm expenses which are chargeable to the farm business have to be assessed subjectively. The percentages allowed in Table XI are approximations. Electricity, for example, may vary from 25% to 100% for the business, depending on circumstances. "Own labor" includes the value of the operator's time, also unpaid family help and general hired farm labor.

Table XI. - General Farm Expenses, Braeside, Sask., 1955

Item	Total Cost	Share to Business	Share to Crops	General Farm Expense	Cultivated Acres Serviced	Cost Per Acre
	\$	%	%	\$	ac.	\$
Fencing:						
Depreciation @ 5%	43.00	100	41.7	17.93	443	0.04
Interest on avg. value @ 5%	43.00	100	41.7	17.93	443	0.04
Repairs:						
Materials	54.56	100	41.7	22.75	443	0.05
Own Labor	50.00	100	41.7	20.85	443	0.05
Contract Labor	-	100	41.7	-	443	-
Electricity	-	75	41.7	-	443	-
Fuel for Stationary Engine	-	100	41.7	-	443	-
Telephone	19.80	50	41.7	4.13	443	0.01
Building Insurance	33.25	90	41.7	12.48	443	0.03
Machinery Insurance	-	100	41.7	-	443	-
TOTAL						0.22

G. MANAGEMENT COSTS

This is an "opportunity cost" charge. That is, what the farm operator could have earned elsewhere for his managerial ability. In agriculture, it is difficult to determine what management earns on the commercial farm as most farm operators are self-employed. Management costs in agriculture may be charged on the basis of the "foreman's wage." This is expressed as a premium of a certain percentage over wages for good farm help. This premium, for purposes of this study, may be in a range of 5 to 25 per cent. For Braeside in 1955, the hourly

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wage rate accepted was 95¢ with a premium of 20%, giving an hourly wage of \$1.14 for management. This is then related to the numbers of man-hours required per acre. In 1955, total man-hours required to produce summerfallow were 1.446 (Table XII).

Table XII. - Man Hours of Labor Required per Acre to Prepare
Summerfallow, Braeside, Sask., 1955

Item	Operations	Man-Hours	Management Charge @ \$1.14 Per Hour	Source
	No.	hrs.	\$	
Field Operations:				
Disc Harrow	2	.600	0.68	Table IV
Spring Tooth Harrow	1	.146	0.17	"
Plough and Pack	1	.700	0.80	"
Miscellaneous Man (or Horse) Labor	-	-	-	Section E
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TOTAL		1.446	1.65	
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H. TOTAL COST PER ACRE TO PREPARE SUMMERFALLOW

Summarizing now, we find the cost of preparing summerfallow at Braeside Sask., in 1955 in Table XIII. This completes Step 1 in the determination of the cost of producing farm crops where summerfallowing is required.

Table XIII. - Cost per Acre of Summerfallowing,
Braeside Sask., 1955

Item	Number of Operations	Cost Per Acre	Source
		\$	
Use of Land		0.68	Section A
Taxes		0.72	Section B
Field Operations:			Section C
Disc Harrow	2	1.46	Section C Table IV
Spring Tooth Harrow	1	0.35	Section C Table IV
Plough and Pack	1	1.91	Section C Table IV
Sub Total	4	3.72	
General Equipment		1.45	Section D Table X
Miscellaneous Labor		-	Section E
General Farm Expenses		0.22	Section F
Management		1.65	Section G
TOTAL COST		8.44	
Average Cost		6.32	
Number of Years			
in Average	15		

Step 2. - To Determine the Cost per Acre of Producing all Crops Grown in 1956 at Braeside, Sask., in the five-year rotation of fallow-wheat-oats (seeded down)-hay-hay and break. Cost of fallow prepared in 1956 will not be calculated for this example. Procedure would be as outlined under Step 1.

Table XIV. - Inventory Values for Land and Improvements,
Braeside Sask., as at Dec. 31, 1955
(Jan. 1, 1956).

Column No.	(1)	(2)	(3)	(4) (2)x(3)÷100	(5)	(6) (2)-(4)+(5)
Item	Number	Value at Jan. 1, 1955	Rate of Depreci- ation	Amount of Depreci- ation	Capital Im- provements a/	Value at Dec. 31, 1955 (Jan. 1, 1956)
		\$	%	\$	\$	\$
Land:						
Total Acres	480	6,000	-	-	-	6,000
Cultivated Acres	443					
Fences	-	867	5	43	50	874
House	1	2,467	5	123	-	2,344
Barn	1	1,197	5	60	-	1,137
Machine Sheds	2	1,038	5	52	-	986
Garage	1	421	5	21	-	400
Granaries	3	631	5	32	-	600
Other Buildings	-	1,225	5	61	-	1,163
Total Value of Land and Improvements		13,846		392	50	13,504

a/ No allowance can be made for the value of the operator's labor or family help on improvements made during the year in the preparation of an inventory statement.

A. USE OF LAND

No change occurred from 1955 to 1956 in the value of the land, the number of cultivated acres or the interest rate, so the charge per acre will be \$0.68 as calculated under Section A of Step 1.

B. USE OF BUILDINGS

Building costs for housing of farm equipment are accounted for under Section C.1., "Fixed Charges for Machinery" and Section D., "Charge for General Farm Equipment", both of Step 1. Storage costs for farm crops remain to be accounted. Actual building charges for the station farm may be used. In addition, the value of the operator's own labor, unpaid family help and general hired farm labor (described as "own labor" in Table XV) are included in calculating building costs. Only those buildings directly necessary for crop production are considered. Costs for buildings jointly occupied by crops and livestock are allocated on the basis of the space occupied. Divide the total building charge by the acreage of land in crops to obtain the cost per acre. In 1956, this amounted to 358 acres for Braeside, which included wheat, oats, barley, mixed hay, cereal hay and rapeseed but does not include seeded permanent pasture or summerfallow. These costs are set forth in Table XV.

C. TAXES

As under Section B of Step 1. Tax bill in 1956 was unchanged from 1955, also number of owned cultivated acres. Therefore, charge for taxes remains at \$0.72 per acre.

Table XV. - Cost of Buildings, Braeside Sask., 1956

Item		Barn	Granaries	Total	Item Sources
	No. of Bldgs.	1	3	4	
1.Value at Jan.1,1956(Dec.31,1955)	\$	1,137	600	1,737	
2.Rate of Depreciation	%	5	5		
3.Amount of Depreciation	\$	57	30	87	(1. x 2.) ÷ 100
Improvements:					
4. Materials	\$	104	-	104	
5. Contract Labor	\$	-	-	-	
6.Value at Dec.31,1956(Jan.1,1957)	\$	1,184	570	1,754	(1)-(3)+(4)+(5)
7.Average Value, 1956	\$	1,160	585	1,745	(1. + 6.) ÷ 2
8.Rate of Interest	%	5	5		
9.Interest Charge	\$	58	29	87	(7. x 8.) ÷ 100
Repairs:					
10. Materials	\$	25	-	25	
Labor:					
11. Own	\$	10	-	10	
12. Contract	\$	-	-	-	
13.Total Cost	\$	150	59	209	(3)+(9)+(10)+(11)+(12)
14.Share to Crops	%	33.3	100		
15.Amount to Crops	\$	50	59	109	(13. x 14.) ÷ 100
16.Cost per Acre	\$	0.14	0.16	0.30	(15) ÷ No. Acres

D. COST OF FALLOW PLUS INTEREST

In crop sequences which incorporate fallow, the cost of preparing the fallow will be charged as a part of the cost of producing succeeding crops. In a two-year rotation of fallow-grain (or other crop), the total cost of fallow from the previous year will be charged plus 6% interest on the cost of the fallow.

In a three-year rotation of fallow-grain-grain (or other crops), two-thirds of the cost of the fallow, plus interest on this at 6%, will be charged to the first crop and the balance will be charged to the second crop, plus interest at 6%, for two years (not compounded). Previous years' fallow costs will be used in calculating charges to the current crops. The net value of a cover crop grown on fallow and harvested will be deducted from the cost of the fallow.

The charge for fallow in the cost of producing wheat at Braeside, Sask., in the five-year rotation under discussion is then:

Fallow cost in 1955: \$8.44 (Table XIII)

Charge to first crop: $\$8.44 \times .667 = \5.63

Charge to second crop = $\$8.44 - \$5.63 = \$2.81$

Interest on Fallow for first crop: $\$5.63 \times .06 = \0.34

Interest on Fallow for second crop: $2 (\$2.81 \times .06) = \0.34

Total cost of Fallow to first crop: $\$5.63 + \$0.34 = \$5.97$

Total cost of Fallow to second crop: $\$2.81 + \$0.34 = \$3.15$

E. HAIL INSURANCE

Total amount to be prorated on an acreage basis to the crops insured. Municipal hail insurance which is charged with taxes will be levied under taxes if not separable. In 1956, no hail insurance was taken out by the Braeside Station farm.

F. SEED

Charge at the market price prevailing at seeding time for cleaned seed of comparable quality. Add cost of treating chemicals, labor and equipment charges. Base equipment charges on replacement cost. Prorate costs of treatment over acreage sown to treated seed.

In hay crops, the price of the seed should be charged over the period for which the sward persists. This was two years for this particular rotation. Cost per acre for grass seed as given in Table XVI was then:

$$(\$2.75 + \$3.20 + \$0.65) \div 2 = \$3.30 \text{ per acre per year.}$$

Table XVI. - Cost of Seed and Seed Treating per Acre,
Braeside, Sask., 1956

Crop	No. 1 Certified Seed			Seed Treatment			Total Cost
	Amount	Cost	Cost	Machine	Man	Materials	
		Per Unit	Per Acre	Use	Labor	c/	
	lb.	\$	\$	a/ \$	b/ \$	\$	\$
Wheat	93	0.042/lb.	3.91	0.06	0.03	0.07	4.07
Oats	75	0.043/lb.	3.22	0.06	0.04	0.09	3.41
Barley	95	0.039/lb.	3.70	0.06	0.04	0.09	3.89
Alfalfa	5	0.55/lb.	2.75	-	-	-	2.75
Crested Wheat	5	0.64/lb.	3.20	-	-	-	3.20
Sweet Clover	5	0.13/lb.	0.65	-	-	-	0.65

a/ Total cost of \$16.87 for interest, depreciation and housing prorated over 275 acres of wheat, oats and barley.

b/ Assumed that 50 bushels treated per hour and charged at \$0.95 per hour for labor.

c/ Mercury dust costing \$1.20 for 14 ounces applied at $\frac{1}{2}$ ounce per bushel.

G. MATERIALS

1. Fertilizer

Price on farm at Braeside, Sask., for 11-48-0 was \$115.44 per ton or 5.8¢ per pound in 1956. Cost per acre would then be \$1.74 for fertilizer if applied at 30 pounds per acre for wheat on fallow. Where there is a residual effect from fertilizer, charge the appropriate proportion to the first and second crops. At Braeside, it was considered that there was no residual benefit from 11-48-0 at 30 pounds per acre so the total cost would be charged to the first crop.

No fertilizer was applied to the crops in this particular rotation.

2. Spray

Spray materials were applied at 5 ounces of acid equivalent per acre. Price per gallon was \$4.00 for 64 ounces of acid equivalent. Cost per acre is then: \$0.31 for spray materials.

3. Twine

Cost per pound for twine for baling hay in 1956 was \$0.24. Amount of twine used for baling hay was 6 pounds per ton or .15 pounds per 50-pound bale. At a yield of 1.50 tons of hay per acre, twine required is:

$$1.50 \times 6 = 9 \text{ pounds per acre}$$

Cost per acre for twine is then:

$$9 \times \$0.24 = \$2.16$$

No twine was used for grain crops. Cost of such would be determined by prorating the total twine cost over the acreage for which it was used.

H. FIELD OPERATIONS

All field operations performed in the fall for land preparation will be considered to have been performed in the one crop year and no special interest charges will be levied against such fall operations.

No change was considered, for the purpose of this procedure, to have occurred in replacement costs for equipment from 1955 to 1956. Thus, data calculated in Table III are considered applicable to both years for the purpose of this monograph. Hourly costs have been calculated for both years in those cases where total hours of operation differed between 1955 and 1956. Total costs of field operations, including charges for power and implement, fuel and man-labor are set forth in Table XVII for all field operations performed in the rotation under discussion in 1956.

When perennial crops and annual crops are seeded together, costs of seeding should be prorated between the two types of crops according to the pounds of seed in the mixture. The cost of seeding the perennial crop should then be divided by the number of years it is down or persists in order to obtain the annual charge.

Tillage operations for preparation of land for seeding down to grass are prorated equally over the period of the stand. Costs should be obtained for the year in which they were performed. In the example, 1956 costs are used as earlier comparable costs were not available.

Table XVII.

Cost Per Acre of Field Operations, Braeside, Sask., 1956
Five-Year Rotation: Fallow-Wheat-Oats (Seeded Down)-Hay-Hay

Field No.	Field Operations (one of each in all cases)	Machine Hours	Tractor Hours	Fuel b/ Gals.	Man-Hours	Machine Power	Use Costs Implement	Fuel c 28.0 gal.	Oil, Grease and Filters @ 10% of Fuel Costs	Labor	Total Cost
1	Wheat on Fallow:										
	Plough and Pack	.700	.700	1.540	.700	0.45	0.33	0.43	0.04	0.66	1.91
	Seed Wheat	.225	.225	.495	.225	0.14	0.09	0.14	0.01	0.21	0.59
	Spray	.286	.286	.629	.286	0.18	0.19	0.18	0.02	0.27	0.84
	Swath	.450	.450	.990	.450	0.29	0.54	0.28	0.03	0.45	1.59
	Combine S.P.	.625	-	.750	1.250	-	4.19	0.21	0.02	1.25	5.67
2	Fallow:										
	Plough and Pack	.700	.700	1.540	.700	0.45	0.33	0.43	0.04	0.66	1.91
	Cultivate	.550	.550	1.210	.550	0.35	0.13	0.34	0.03	0.52	1.37
3	First-Year Hay:										
	Cut (Tractor Mower)	.667	.667	1.467	.667	0.43	0.33	0.41	0.04	0.68	1.89
	Rake (Side Del.)	.600	.600	1.320	.600	0.38	0.38	0.37	0.04	0.60	1.77
	Bale	.900	.900	2.880	.900	0.58	2.07	0.81	0.08	0.90	4.44
4	Second-Year Hay and Break: a/										
	Cut (Tractor Mower)	.625	.625	1.375	.625	0.40	0.31	0.38	0.04	0.62	1.75
	Rake (Side Del.)	.500	.500	1.100	.500	0.32	0.32	0.31	0.03	0.50	1.48
	Bale	.750	.750	2.400	.750	0.48	1.72	0.67	0.07	0.75	3.69
	Plough	1.250	1.250	2.750	1.250	0.80	0.39	0.77	0.08	1.19	3.23
	Disc Harrow	.500	.500	1.100	.500	0.32	0.09	0.31	0.03	0.48	1.23
5	Oats Seeded Down:										
	Plough and Pack	.700	.700	1.540	.700	0.45	0.33	0.43	0.04	0.66	1.91
	Seed Oats and Grass	.225	.225	.495	1.150	0.14	0.09	0.14	0.01	1.09	1.47
	Swath	.400	.400	.880	.400	0.26	0.48	0.25	0.02	0.40	1.41
	Combine S.P.	.500	-	.600	.909	-	3.35	0.17	0.02	0.91	4.45

a/ These are a part of the 1957 crop year fallow operations

b/ At 2.2 gal./hr. for tractor; 1.2 gal./hr. for combine; 1.0 gal./hr. for baler motor c/At \$0.95 for tillage, seeding and spraying; at \$1.00 for harvesting op.

In 1956, cost of field operations for seeding oats down to grass were \$1.47 (Table XVII). Mixture seeded was 75 pounds of oats and 15 pounds of grass seed. Weight of oats was 88.2% of the mixture and grass seed was 11.8% of the total. Cost of seeding oats in 1956 was $\$1.47 \times .882 = \1.29 per acre. Cost of seeding grass for first- and second-year hay was then:

$$(\$1.47 \times .118) \div 2 = \$0.09 \text{ per acre each in 1957 and 1958.}$$

Horse labor, when used, can be charged on the basis of the alternative cost of the minimum size of tractor to perform the same job.

I. GENERAL EQUIPMENT

Refer to Step 1, Section D for procedure. We now proceed as follows:

Table XVIII. - Sources of Cash Income, Braeside, Sask., 1956

Source	Amount	Proportion of Total
	\$	%
Crops	4,573	51.7
Livestock	4,267	48.3
Total	8,840	100.0

I. 1. TRUCK EXPENSES (AND/OR AUTOMOBILE).

Procedure is as outlined under Step 1, Section D. 1.

Table XIX. - Cost of Truck Operation, Braeside, Sask., 1956

Make: Ford Size: 1 ton Year: 1954 Replacement Value: \$2,800

Item		Cost
		\$
Fixed Costs:		
Interest ($\frac{1}{2}$ replacement value x .06)		84.00
Depreciation (15%)		420.00
Repairs:		
Parts (actual)		160.61
Tires		143.96
Labor:		
Contract		(incl. in above two items)
Own (at \$0.95 per hour)		5.70
Housing (at .5% of replacement value)		14.00
Insurance		(27.00
Licenses		(
Antifreeze		6.49
Total Fixed Cost		861.76
Operating Costs:		
Fuel (1,017 gals. at 37.9¢)		385.63
Oil		(
Grease		(28.69
Filters		(
Total Operating Cost		414.32
TOTAL COST		1,276.08

Miles operated in 1956: 9,301 miles

Cost per mile: \$0.137

Miles operated on Business in 1956: 7,500 miles

Cost of Operating truck on business: \$1,027.50

Share of truck expenses to crops: (51.7% from Table XVIII) \$531.22

Truck expenses per cultivated acre: $\$531.22 \div 443 = \1.20

I. 2. EXPENSES FOR OTHER GENERAL EQUIPMENT

No change occurred from 1955 to 1956 in the list of general equipment on this station farm or in the replacement values of same. Thus data may be transferred directly from Step 1, Section D. for this item.

Table XX. - Charges for Other General Equipment, Braeside, Sask.,
1956

Item	Total Cost	Source
	\$	
1. General Equipment Used for Crops Only	223.38	Table VII
2. General Equipment Used for Both Crops and Livestock	89.75	Table VIII
Share to Crops: 51.7%		Table XVIII
3. Amount to Crops: ($\$89.75 \times .517$)	46.40	
Total Other General Equipment Costs for Crops	269.78	Item (1) + Item (3)

Other General Equipment Charge per Cultivated Acre is then:

$$\$269.78 \div 443 = \$0.61$$

I. 3. CHARGE FOR UNUSED FIELD EQUIPMENT

One item on inventory continued unused, namely, the rod weeder. Charges for this remain unchanged at \$0.05 per cultivated acre as given in Table IX.

I. 4. TOTAL GENERAL EQUIPMENT CHARGES

Table XXI. - General Equipment Charges for Crops,
Braeside, Sask., 1956

Machine or Machinery Group	Amount	Cost per Cultivated Acre	Table Source
	\$	\$	
Truck	531.22	1.20	XIX
Other General Equipment	269.78	0.61	XX
Unused Field Equipment	23.63	0.05	IX
TOTAL	824.63	1.86	

J. MISCELLANEOUS MAN (OR HORSE) LABOR

Labor costs in connection with driving the truck when combining are accounted for in Table XVII. - "Cost Per Acre of Field Operations", under combining expenses. Trucking costs connected with hauling grain to market are accounted for partly under Section I.4. "Total General Equipment Charges". Labor costs for hauling grain remain to be accounted. If the farm operator provides his own truck and labor for hauling grain, this cost can be accounted for as outlined in Table XXII. Prorate the total cost over the acreage in crop. If hauling costs are hired, charge the commercial rate and relate to a per-acre cost on the basis of yield per acre.

Table XXII. - Miscellaneous Man-Labor for Grain Production,
Braeside, Sask., 1956

Column No.	(1)	(2)	(3) (2) ÷ 3 tons	(4) (3) ÷ 1 ton	(5) (4) x \$0.95	(6) (5) ÷ (1)
Crop	Acres in Crop	Total Pro- duction tons	Truck Loads ^{a/} b/ No.	Labor for Loading and Hauling ^{c/} Hrs.	Total Labor Cost \$	Labor Cost Per Acre \$
Wheat	51	27.5	8.6	8.6	8.55	0.16
Oats	148	65.3	21.8	21.8	20.90	0.14
Barley	81	64.2	21.4	21.4	19.95	0.25
Rapeseed	40	17.2	5.7	5.7	5.70	0.14

^{a/} No account taken of shrinkage or loss

^{b/} At 3 tons per load

^{c/} At 1 ton per hour

Labor costs for loading and hauling grain to market were allowed on the total production of small grains and oil seed crops, even though a portion of this was used for feed and seed. For example, the man-hours per acre for wheat are $8.6 \div 51 = .169$ man-hours. Miscellaneous labor for hay production would include hauling and storing baled hay. This was taken to require 2.0 man-hours per ton^{1/} which gives a total requirement of three man-hours (1.50×2.0) when the yield per acre is 1.50 tons of hay.

^{1/} Kalbfleisch, W. and A.I. Magee, Harvesting Machinery for Hay and Silage (Can. Agric., Pub. 885, July 1953,) p. 18.

K. INTEREST ON PRODUCTION COSTS

Interest should be charged on all production costs for a period of six months at 6% (in effect, 3% for 12 months) on items E to J, inclusive of Step 2, namely: hail insurance, seed, materials (fertilizer, spray, twine, etc.), field operations, general equipment (crop share of truck and/or auto expenses, other general equipment, unused field equipment) and miscellaneous labor costs. For wheat on fallow, unfertilized, these totalled \$17.00 per acre. At 3%, interest on production costs was \$0.51 per acre. For fertilized wheat on fallow, production costs would total \$18.74 (30 pounds per acre of 11-48-0) and interest per acre is then \$0.56.

L. GENERAL FARM EXPENSES

These are determined as outlined under Section F of Step 1.

Table XXIII. - General Farm Expenses, Braeside, Sask., 1956

Item	Total Cost	Share to Business	Share to Crops	General Farm Expenses	Cultivated Acres Serviced	Cost Per Acre
	\$	%	%	\$	Ac.	\$
Fencing:						
Depreciation @ 5%	44.00	100	51.7	22.75	443	0.05
Interest on avg. value @ 5%	42.60	100	51.7	22.02	443	0.05
Repairs:						
Materials	15.57	100	51.7	8.05	443	0.02
Own Labor	10.00	100	51.7	5.17	443	0.01
Contract Labor	-	100	51.7	-	443	-
Electricity	-	75	51.7	-	443	-
Fuel for Stationary Engine	-	100	51.7	-	443	-
Telephone	19.80	50	51.7	5.12	443	0.01
Building Insurance	33.00	90	51.7	15.35	443	0.03
Machinery Insurance	-	100	51.7	-	443	-
Total						0.17

N. MANAGEMENT COSTS

Determined as outlined under Section G. of Step 1. Man-hours of labor included in the fallow cost are not included here but miscellaneous labor required for hauling is included.

Table XAIV. - Man-Hours of Labor Required per Acre to Produce Crops, Braeside, Saskatchewan, 1956.

Crop	Man-Hours			Management Charge	Table Source
	Field Work	Hauling	Total	@ \$1.14/hr.	
				\$	
Wheat on Fallow	2.911	0.169	3.080	3.51	XVII, XXII
First-Year Hay	2.468	3.000	5.468	6.23	" "
Second-Year Hay	2.176	3.000	5.176	5.90	" "
Oats (Seeded Down)	2.501	0.147	2.648	3.02	" "

Labor hours are prorated over the various crops where joint outlays occur, as described under Section H, "Field Operations," of Step 2.

N. TOTAL AND AVERAGE COSTS PER UNIT

Table XXV. - Cost Per Acre of Producing Crops, Braeside, Sask., 1956
Five-Year Rotation: Fallow-Wheat-Oats-Hay-Hay

Cost Item	Section Source in Step 2	Fallow Wheat	Oats (Seeded Down)	First-Year Mixed Hay	Second-Year Mixed Hay
		\$	\$	\$	\$
Use of Land	A	0.68	0.68	0.68	0.68
Use of Buildings	B	0.30	0.30	0.30	0.30
Taxes	C	0.72	0.72	0.72	0.72
Cost of Fallow plus Interest	D	5.97	3.15	-	-
Hail Insurance	E	-	-	-	-
Seed	F	4.07	3.41	3.30	3.30
Fertilizer	G.1	-	-	-	-
Spray	G.2	0.31	-	-	-
Twine	G.3	-	-	2.16	2.16
Field Operations:	H				
Preparation and Seeding:					
Plough and Pack		1.91	0.64	0.64	0.63
Seed		0.59	1.29	0.09	0.09
Spray		0.84	-	-	-
Harvesting:					
Swath (or cut)		1.59	1.41	1.89	1.75
Rake		-	-	1.77	1.48
Combine (or bale)		5.67	4.45	4.44	3.69
General Equipment	I	1.86	1.86	1.86	1.86
Miscellaneous Labor	J	0.16	0.14	3.00	3.00
Interest on Production Costs	K	0.51	0.40	0.57	0.54
General Farm Expenses	L	0.17	0.17	0.17	0.17
Management	M	3.51	3.02	6.23	5.90
TOTAL COST		28.86	21.64	27.82	26.27

Table XXVI. - Cost Per Acre of Producing Crops, Braeside, Sask., 1956.
Five-Year Rotation: Fallow-Wheat-Oats-Hay-Hay
(Fallow Costs Grouped With Current Costs)

Cost Item	Fallow		Wheat		Oats (Seeded Down)		First-Year Mixed Hay		Second-Year Mixed Hay	
	Cost	Percent	Cost	Percent	Cost	Percent	Cost	Percent	Cost	Percent
	\$	%	\$	%	\$	%	\$	%	\$	%
Use of Land	1.13	3.9	0.91	4.2	0.68	2.4	0.68	2.6	0.68	2.6
Use of Buildings	0.30	1.0	0.30	1.4	0.30	1.0	0.30	1.1	0.30	1.1
Taxes	1.20	4.2	0.96	4.4	0.72	2.6	0.72	2.7	0.72	2.7
Seed	4.07	14.1	3.41	15.8	3.30	11.8	3.30	12.6	3.30	12.6
Fertilizer	-	-	-	-	-	-	-	-	-	-
Spray	0.31	1.1	-	-	-	-	-	-	-	-
Twine	-	-	-	-	2.16	7.8	2.16	8.2	2.16	8.2
Machine Use	7.31	25.3	5.01	23.2	4.44	15.9	3.82	14.5	3.82	14.5
Fuel, Oil, Grease	2.02	7.0	1.08	5.0	1.92	6.9	1.67	6.4	1.67	6.4
Man-Labor	3.91	13.5	3.08	14.2	5.46	19.6	5.15	19.6	5.15	19.6
General Equipment	2.83	9.8	2.34	10.8	1.86	6.7	1.86	7.1	1.86	7.1
Interest on										
Production Costs	0.85	3.0	0.74	3.4	0.57	2.0	0.54	2.1	0.54	2.1
General Farm Expenses	0.32	1.1	0.24	1.1	0.17	0.9	0.17	0.7	0.17	0.7
Management	4.61	15.9	3.57	16.5	6.23	22.4	5.90	22.4	5.90	22.4
	28.86	100.0	21.64	100.0	27.81	100.0	26.27	100.0	26.27	100.0

Table XXVII. - SUMMARY OF CROP YIELDS AND COSTS OF PRODUCTION TO 1956,
Braeside, Sask.
Five-Year Rotation: Fallow-Wheat-Oats-Hay-Hay

Crop	Years Grown	Yield per Acre		Cost per Acre		Cost per Bushel/Ton	
		1956	Average	1956	Average	1956	Average
	No.	bu./tons	bu./tons	\$	\$	\$	\$
Wheat on Fallow (not fertilized)	15	38.0	26.4	28.86	21.61	0.76	0.88
Oats (seeded down)	14	52.0	46.6	21.64	16.47	0.42	0.35
First-Year Hay	15	1.50	1.40	27.81	20.85	18.54	14.89
Second-Year Hay	15	1.50	1.23	26.27	19.67	17.51	15.99

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APPENDIX

Conversion of Earlier Cost Data to a New Method of Calculation

The adoption of a revised method of determining costs of producing farm crops may result in considerably different values than what would be obtained by some other method. This makes comparison of current costs with those calculated in earlier years difficult. In order to establish accurate comparisons, it is often necessary to recalculate earlier data using the revised technique in order to obtain true values. In many cases, however, this is not possible or is very time consuming. A simple method of converting earlier data to a new base is to establish a bench mark where the data are calculated by both methods. Then the percentage changes in costs may be determined from the earlier series and applied to the new base. This was done for Braeside, Sask., for 1956. In this year, costs of production per acre as calculated by the earlier method (A) and the revised method (B) for wheat on fallow were as follows:

Wheat on fallow: \$21.04 (A); \$28.86 (B).

It will be noted that there was a considerable increase in absolute cost.

In the table of this Appendix, there is set forth the method employed to convert the earlier series of cost data to the new base. This method is not strictly accurate as it assumes that the relationships between the various cost items are unchanged between method A and method B. This may not in fact be true. For example, in 1956, under method B, management charges, exclusive of those in the fallow costs, became 12.2% of the total cost as compared with 3.6%

... Continued

(Cont'd.)

under method A. The cost of field operations was 46.3% of the total under method A and dropped to 36.7% for method B. Cost of fallow as a proportion of the total remained relatively unchanged however, 22.6% (A) as compared with 20.7% (B).

Conversion of an Earlier Cost Series for Producing
Wheat on Fallow to a Revised Series,
Braeside, Sask., 1942-56.

Column No.	(1)	(2)	(3)	(4)	(5) (4) ÷ (5)	(6)
Year	Yield per Acre	Cost of Production per Acre <u>1/</u> Method A	Index of Cost of Production <u>2/</u>	Revised Cost of Production Per Acre <u>3/</u>	Revised Cost of Production Per Bushel	Farm Price Per Bushel Sask. <u>4/</u>
	bu.	\$	(1956 = 100)	\$	\$	\$
1942	30.0	10.73	51.0	14.72	0.49	0.77
1943	21.5	10.88	51.7	14.92	0.69	1.14
1944	25.5	10.09	48.0	13.85	0.54	1.25
1945	22.5	11.95	56.8	16.39	0.73	1.64
1946	19.0	13.00	61.8	17.84	0.94	1.62
1947	10.0	12.12	57.6	16.62	1.66	1.63
1948	18.5	16.63	79.0	22.80	1.23	1.63
1949	18.3	15.58	74.0	21.36	1.17	1.61
1950	24.5	15.24	72.4	20.89	0.85	1.49
1951	35.3	20.60	97.9	28.25	0.80	1.52
1952	38.0	19.12	90.9	26.23	0.69	1.59
1953	31.8	19.85	94.3	27.21	0.86	1.33
1954	25.5	18.24	86.7	25.02	0.98	1.09
1955	37.0	21.29	101.2	29.21	0.79	1.26
1956	38.0	21.04	100.0	28.86	0.76	1.07
Average	26.4	15.76		21.61	0.88	1.38

1/ Method A refers to the procedure used during the period 1942-56.

2/ Obtained by dividing each figure by the 1956 cost of \$21.04 and multiplying by 100.

3/ Obtained by multiplying the new cost figure of \$28.86 calculated by Method B for 1956 by the Index of Cost of Production in column (3) for respective years.

4/ Dominion Bureau of Statistics. Data for 1954 to 1956, inclusive, subject to revision when all final payments announced.



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